

CLAIMS

1. A control circuit for controlling an electromechanical elevator brake, said control circuit comprising at least one brake coil (L1), a direct-voltage source (BR1), a semiconductor switch arrangement and a control unit (CO1), and which circuit further comprises a current measuring unit (IM1) producing current data that can be passed to the control unit (CO1), **characterized** in that the circuit comprises at least two semiconductor switches (SW1, SW2), and that these can be controlled by the control unit (CO1) in an alternate manner such that the working condition of each switch can be checked in its turn on the basis of feedback data obtained from the current measurement.
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2. A control circuit according to claim 1, **characterized** in that the supply of current to the brake coil can be completely interrupted by means of one semiconductor switch connected to the direct-current circuit.
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3. A control circuit according to claim 1 or 2, **characterized** in that the current flowing through the brake coil can be measured by the current measuring unit.
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4. A control circuit according to any one of claims 1-3, **characterized** in that the direct-voltage source (BR1) is a rectifier bridge, and the current in the alternating-current network feeding the direct-voltage bridge can be measured by the current measuring unit.
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5. A control circuit according to any one of claims 1-4, **characterized** in that the working condition of the semiconductor switches can be monitored on the basis of the current measurement data both when the brake is in a released state and when the brake is in a closed state.
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6. A control circuit according to any one of claims 1-5, characterized in that the circuit comprises a voltage measuring unit (VM2) arranged in parallel with the brake coil and producing data that can be passed to the control unit (CO1).
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7. A control circuit according to any one of claims 1-6, characterized in that the state of the brake can be determined continuously on the basis of measurement data
10 obtained from the circuit.
8. A control circuit according to any one of claims 1-7, characterized in that the semiconductor switches have been arranged to be opened when the safety circuit of the
15 elevator is interrupted.
9. A control circuit according to any one of claims 1-8, characterized in that the circuit is provided with a voltage measuring unit (VM1) producing voltage data that
20 can also be used to control the semiconductor switches.
10. A control circuit according to any one of claims 1-9, characterized in that the brake can be closed at two different speeds.
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11. A control circuit according to any one of claims 1-10, characterized in that the control circuit comprises fly-wheel diodes (D1,D2) connected to it.
- 30 12. An electromechanical elevator brake, comprising at least a brake coil, a pressure element, a brake pad pressed towards a braking surface by the pressure element, said brake pad being movable by the action of the force effects of a magnetic field set up by a current flowing in the brake coil, and a brake control circuit, characterized in that the current supplied to the brake coil can be controlled by a control circuit having a direct-current circuit with at least two semiconductor switches
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connected to it, and the brake coil current can be completely interrupted by one semiconductor switch controlling it.